

What is claimed is :

1. A multiple component meltblown web comprised of at least 95% by weight of multiple component meltblown fibers having an average effective diameter of less than 10 microns, the multiple component meltblown fibers comprised of a first polymer component and a second polymer component distinct from the first polymer component, the first polymer component being comprised of from 1% to 99% by weight of a first polymer and from 99% to 1% by weight of a second polymer wherein the first and second polymers are selected from the group consisting of polyolefins, polyesters, polyamides, polystyrene, polyurethanes, fluoropolymers, olefinic ionomer resins, random co-polymers of ethylene and methacrylic acid, and random co-polymers of ethylene and vinyl acetate.

2. The web according to claim 1, wherein the first polymer component is comprised of from 5% to 95% by weight of the first polymer and from 95% to 5% by weight of the second polymer.

3. The web according to claim 2, wherein the first polymer component is comprised of from 10% to 90% by weight of the first polymer and from 90% to 10% by weight of the second polymer.

4. The web according to claim 3 wherein the first and second polymers are selected from the group consisting of polyethylene, polypropylene, poly(ethylene terephthalate), poly(trimethylene terephthalate), poly(butylene terephthalate), poly(hexamethylene adipamide), poly(ϵ -caprolactam), random co-polymers of ethylene and methacrylic acid, ionomeric random co-polymers of ethylene and methacrylic acid, polyurethanes comprising 4,4-diphenyl-methane diisocyanate hard segments and polyether-based polyol soft segments, polyurethanes comprising 4,4-diphenyl-methane diisocyanate hard segments and polyester-based polyol soft segments, and random co-polymers of ethylene and vinyl acetate.

5. The web according to claim 3 wherein the first polymer is a polyolefin and the second polymer is a polyester.

6. The web according to claim 5 wherein the first polymer is selected from the group consisting of polyethylene and polypropylene and the second polymer is selected from the group consisting of poly(ethylene terephthalate), poly(trimethylene terephthalate), and poly(butylene terephthalate)

7. The web according to claim 6 wherein the second polymer component is selected from the group consisting of polyolefins and polyesters.

8. The web according to claim 7 wherein the second polymer component is a polyester.

5 9. The web according to claim 8 wherein the first polymer is polyethylene, the second polymer is poly(butylene terephthalate), and the second polymer component is poly(ethylene terephthalate).

10 10. The web according to claim 3 wherein the first polymer is polypropylene and the second polymer is polyethylene.

11. The web according to claim 10 wherein the second polymer component is polypropylene.

12. The web according to claim 3 wherein the first polymer is a polyolefin and the second polymer is an olefinic ionomer resin.

15 13. The web according to claim 12 wherein the second polymer component is a polyester.

14. The web according to claim 13 wherein the first polymer is polyethylene, the second polymer is an ionomeric random co-polymer of ethylene and methacrylic acid, and the second polymer component is poly(ethylene terephthalate).

20 15. A multiple component meltblown web comprised of at least 95% by weight of meltblown fibers having an average effective diameter of less than 10 microns, the meltblown fibers comprised of a first polymer component and a second polymer component distinct from the first polymer component, the first polymer component being comprised of from 1% to 99% by weight of a first
25 polymer and from 99% to 1% by weight of a second polymer wherein the first and second polymers consist essentially of non-elastomeric polymers.

16. The web according to claim 15 wherein the first and second polymeric components consist essentially of non-elastomeric polymers.

30 17. A multiple component meltblown web comprised of at least 95% by weight of meltblown fibers having an average effective diameter of less than 10 microns, the meltblown fibers comprised of a first polymer component and a second polymer component distinct from the first polymer component, the first polymer component being comprised of from 1% to 99% by weight of a first polymer and from 99% to 1% by weight of a second polymer wherein the first and
35 second polymers consist essentially of elastomeric polymers.

18. The web according to claim 17 wherein the first and second polymeric components consist essentially of elastomeric polymers.

19. The web according to either of claims 15 or 17 wherein the first polymer component comprises from 5% to 95% by weight of the first polymer
5 and from 95% to 5% by weight of the second polymer.

20. The web according to claim 19 wherein the first polymer component comprises from 10% to 90% by weight of the first polymer and from 90% to 10% by weight of the second polymer.

21. The web according to any of claims 3, 15, or 17 wherein the
10 multiple component fibers are bicomponent fibers.

22. The web according to claim 21 wherein the first and second polymer components are arranged in a side-by-side arrangement.

23. The web according to claim 21 wherein the first and second polymer components are arranged in a sheath-core arrangement.

15 24. A composite sheet comprising:

a first fibrous layer having a first side and an opposite second side;

a second fibrous layer bonded to the first side of the first fibrous layer;

20 the first fibrous layer being a multiple component meltblown web comprised of at least 95% by weight of multiple component meltblown fibers having an average effective diameter of less than 10 microns, the multiple component meltblown fibers comprised of a first polymer component and a second polymer component distinct from the first polymer component, the first polymer component being comprised of from 1% to 99% by weight of a first
25 polymer and from 99% to 1% by weight of a second polymer;

the second fibrous layer comprised of at least 95% by weight of second layer fibers having an average effective diameter that is greater than the average effective diameter of the meltblown fibers of the first fibrous layer.

25. The sheet according to claim 24, wherein the first polymer
30 component being comprised of from 5% to 95% by weight of the first polymer and from 95% to 5% by weight of the second polymer.

26. The sheet according to claim 25, wherein the first polymer component being comprised of from 10% to 90% by weight of the first polymer and from 90% to 10% by weight of the second polymer.

27. The sheet according to claim 26, wherein the first and second polymers and the second polymer component are selected from the group consisting of polyolefins, polyesters, polyamides, polystyrene, polyurethanes, fluoropolymers, olefinic ionomer resins, random co-polymers of ethylene and methacrylic acid, and random co-polymers of ethylene and vinyl acetate.

28. The sheet according to claim 27, wherein the first and second polymers and the second polymer component are selected from the group consisting of polyolefins and polyesters.

29. The sheet according to claim 28 wherein the polyolefin is selected from the group consisting of polyethylene and polypropylene and the polyester is selected from the group consisting of poly(ethylene terephthalate), poly(trimethylene terephthalate), and poly(butylene terephthalate).

30. The sheet according to claim 29, wherein the first polymer is polyethylene, the second polymer is poly(butylene terephthalate), and the second polymer component is poly(ethylene terephthalate).

31. The sheet according to claim 27 wherein the multiple component meltblown fibers are bicomponent fibers and the second fibrous layer is a spunbond layer.

32. The sheet according to claim 31 wherein the spunbond layer comprises bicomponent spunbond fibers.

33. The sheet according to claim 32 wherein the polymer components of the meltblown fibers are arranged in a side-by-side configuration and the spunbond fibers are sheath-core fibers.